# Before the FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

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) File No. SAT-STA-2009
) Call Sign DBS8801
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## APPLICATION FOR SPACE STATION SPECIAL TEMPORARY AUTHORITY<sup>1</sup>

EchoStar Satellite Operating L.L.C. ("DISH") hereby requests, for a period of 60 days beginning on April 15, 2008, a space station Special Temporary Authority ("STA") to relocate the EchoStar 1 satellite from 148° W.L. to 77.15° W.L. Once there, EchoStar 1 will be operated by QuetzSat, S. de R.L. de C.V. ("QuetzSat") as a Mexican-licensed satellite. To the extent necessary, DISH also requests a waiver of the Commission's rules to use two C-band frequencies

<sup>&</sup>lt;sup>1</sup> Along with this application, DISH will be requesting (1) a blanket earth station license to operate with EchoStar 1 at 77.15° W.L. as a Mexican-licensed satellite and (2) space station STA to operate the EchoStar 1 satellite to 77.15° W.L. pending the re-flagging of EchoStar 1 as a Mexican-licensed satellite. DISH will also file an application to transfer the EchoStar 1 satellite to QuetzSat for operation under Mexican-authority. DISH's sister company, EchoStar Corporation ("EchoStar"), will be requesting: (1) earth station STA to support the relocation of the EchoStar 1 satellite to 77.15° W.L.; (2) earth station STA to support temporary space station operations at 77.15° W.L. pending the re-flagging of EchoStar 1 as a Mexican-licensed satellite; and (3) the modification of three existing earth station licenses (Call Signs E080058, E980118 and E010240) to perform feeder link and TT&C operations with EchoStar 1 at 77.15° W.L. EchoStar has received temporary authority to operate the EchoStar 8 satellite at 77.0° W.L. under U.S. authority, File No. SAT-STA-20080616-00121 (granted Nov. 7, 2008), and has requested a modification to its blanket earth station license to operate with the EchoStar 8 satellite after it is re-flagged under Mexican authority, File No. SES-MFS-20080724-00977 (filed Jul. 24, 2008).

for TT&C operations during the relocation of the satellite. The relocation of the satellite will be at DISH's own risk, pending the grant of blanket earth station authorization allowing DISH to serve the United States and the re-licensing of the satellite as a Mexican-licensed satellite.

As the Commission is aware, QuetzSat is an affiliate of SES Latin America, S.A. ("SES-LA") and SES S.A. (collectively, "SES"), with which EchoStar has entered into an agreement for the development of the Mexican BSS location at 77° W.L.<sup>2</sup> Pursuant to that agreement, the EchoStar 4 satellite has already been deployed to 77° W.L. with the Commission's approval.<sup>3</sup> EchoStar has also sought Commission approval to modify its blanket earth station to operate with the EchoStar 8 satellite as a Mexican-licensed satellite from 77.0° W.L.<sup>4</sup>

EchoStar 77 Corporation ("EchoStar 77 Corp."), a wholly-owned subsidiary of EchoStar, recently entered into Satellite Service Agreements with SES-LA and DISH ("EchoStar 77 SSAs"). Under those agreements, QuetzSat will provide service to EchoStar 77 Corp. on its future QuetzSat-1 satellite over all 32 available channels at 77° W.L. subject to the receipt of all required approvals. EchoStar 77 Corp., in turn, will provide service to its parent, EchoStar, and, its affiliate, DISH. The EchoStar 77 SSAs also allow either DISH or EchoStar to move an

 $<sup>^2</sup>$  See 77° W.L. Agreement, filed in File No. SAT-STA-20080616-00121, Attachment 3 ("EchoStar 8 Application").

<sup>&</sup>lt;sup>3</sup> See EchoStar Satellite L.L.C., DA 06-868, Order and Authorization, 21 FCC Rcd 4077 (2006) ("77° W.L. Order"), assigned and transferred to EchoStar Corporation, File Nos. SES-ASG-20071108-01575, SES-T/C-20071108-01566 (consummated Jan. 1, 2008).

<sup>&</sup>lt;sup>4</sup> File No. SES-MFS-20080724-00977 (filed Jul. 24, 2008).

<sup>&</sup>lt;sup>5</sup> Sections 2.H(5) of the Satellite Services Agreement between EchoStar 77 Corporation and SES Latin America S.A. and the Satellite Services Agreement between DISH Network Corporation and EchoStar 77 Corp. ("EchoStar 77 SSAs"), *filed in* EchoStar Satellite Operating L.L.C., File No. SES-LFS-2009\_\_\_\_\_-, Attachment 2 (filed Jan. 30, 2009) ("*EchoStar 1 Application*").

"Interim Satellite" to the 77° W.L. orbital location and use up to all 32 channels available at that location subject to the BSS Concession. DISH will move the EchoStar 1 satellite to 77.15° W.L. once it receives authority from the Commission and will provide DBS programming to consumers in the U.S. over the requested blanket earth station license. The EchoStar 4 satellite will be temporarily moved to 77.3° W.L., subject to Commission approval, which will be requested separately. The EchoStar 1 satellite is intended to replace the EchoStar 4 satellite — which is nearing the end of its life — and will provide service to the United States and Mexico in conjunction with the EchoStar 8 satellite. EchoStar 1 will operate at 77.15° W.L. until the planned launch of the QuetzSat-1 satellite to that orbital location in 2011.

QuetzSat, which pursuant to the BSS Concession was authorized by Mexico to use the BSS frequencies at the 77° W.L. slot,<sup>8</sup> has advised the Mexican Administration of its plan to replace the EchoStar 4 satellite with EchoStar 1 for service to Mexico and the United States, and DISH understands that the Mexican Administration has no objection to this plan. The two

<sup>&</sup>lt;sup>6</sup> *Id.* DISH understands that the use of the EchoStar 1 satellite at 77° W.L. is directly encompassed within the authority granted in QuetzSat's existing concession. That concession is not limited to the operations of any particular satellite at 77° W.L. Secretariat of Communications and Transportation Vice-Ministry of Communications, Concesion Para Ocupar La Posicion Orbital Geoestacionaria 77° Oeste Asignada al Pais y Explotar Sus Respectivas Bandas de Frecuencias 12.2 – 12.7 GHz y 17.3-17.8 GHz, Asi como los Derechos de Emision y Recepcion de Señales, granted February 2, 2005 ("BSS Concession"), *filed in EchoStar 8 Application*, Attachment 2 at 4 (defining the satellite system as "one or more satellites with associated frequencies and their control centers operating in an integral manner to make satellite capacity available for the rendering of satellite services").

<sup>&</sup>lt;sup>7</sup> Amendment #4 to Satellite Relocation and Use Agreement for the 77° W.L. Orbital Location, *filed in EchoStar 1 Application*, Attachment 4. Note that EchoStar 4 and EchoStar 1 may both operate at 77° W.L. for a short period prior to the end-of-life disposal of the EchoStar 4 satellite.

<sup>&</sup>lt;sup>8</sup> BSS Concession.

Administrations have already exchanged letters regarding the use of EchoStar 4, formerly a U.S.-licensed satellite, at 77° W.L.<sup>9</sup>

For the reasons set forth herein, grant of this Application will serve the public interest and will not cause harmful interference to any authorized user of the spectrum. The redeployment of the EchoStar 1 satellite, alongside the EchoStar 8 satellite, into service at 77.15° W.L. will augment the capacity that EchoStar and DISH will have available to serve the United States from that Mexican 77° W.L. slot and result in a greater variety and quality of programming services, including high definition programming and local channels.

### I. GRANT OF THIS APPLICATION IS IN THE PUBLIC INTEREST

Granting DISH's Application is in the public interest. DISH and its affiliate, EchoStar, will be able to take advantage of the greater capabilities that EchoStar 1 brings to bear compared to EchoStar 4 to provide increased programming to U.S. consumers from 77° W.L. while QuetzSat constructs the QuetzSat-1 satellite. EchoStar 4 suffers from two infirmities: limited capacity and limited scope of coverage over the U.S. The Commission found that even this limited service from the Mexican orbital slot at 77° W.L. "could serve the public interest by providing service to areas in the Southern U.S., including additional Spanish language programming to areas with significant Spanish-speaking populations." The redeployment of EchoStar 1, along with EchoStar 8, to 77° W.L. will achieve this and more, as it will ameliorate both of EchoStar 4's defects. It will greatly enhance the programming available from 77° W.L. to U.S. customers, and it will also enhance the scope of U.S. coverage beyond the southern states. By operating both EchoStar 1 and EchoStar 8 at 77° W.L., DISH and EchoStar will have

<sup>&</sup>lt;sup>9</sup> See 77° W.L. Order at Appendix A.

<sup>&</sup>lt;sup>10</sup> See id. at  $\P$  8.

greater operational flexibility to maximize the amount of service available to U.S. consumers than if either satellite operated alone at 77° W.L. This greater operational flexibility will provide the companies with expanded capacity to provide high-definition services and additional high-definition local-into-local markets.

All of this can be achieved without any disruption in service. All programming carried by EchoStar 1 at 148° W.L. today can be switched to another DISH satellite or the EchoStar 5 satellite once that spacecraft has been transferred from 129° W.L. to 148° W.L., which is planned to occur this March.<sup>11</sup>

In sum, the redeployment of EchoStar 1 to 77.15° W.L. is in the public interest, and the grant of the earth station STAs necessary to achieve that redeployment is in the public interest by the same token.

# II. GRANT OF THIS APPLICATION WILL NOT CAUSE HARMFUL INTERFERENCE AND WILL BE AT DISH'S OWN RISK

During the transition from 148° W.L. to 77.15° W.L., regular DBS transmissions on the EchoStar 1 satellite will remain switched off, with only TT&C operations being performed in the C-band (discussed below). DISH also will operate its TT&C payload according to the following conditions:

- DISH will coordinate its TT&C operations with all potentially affected operating satellite networks.
- No harmful interference will be caused to any lawfully operating satellite network or radiocommunication system and DISH operations will cease

<sup>&</sup>lt;sup>11</sup> The Commission has granted DISH authority to move the EchoStar 5 satellite to 148° W.L., and DISH's application for modification of its authority to operate EchoStar 5 at 148° W.L. is pending. *See* File Nos. SAT-STA-20081003-00201 and SAT-A/O-20081003-00215 (originally filed as File Nos. SAT-MOD-20081003-00199, SAT-MOD-20081003-00200 (filed Oct. 3, 2008)).

- immediately upon notification of harmful interference. Further, DISH shall notify the Commission immediately, in writing, of such an event.
- DISH will accept interference from any lawfully operating satellite network or radiocommunication system.

DISH requests that the Commission authorize the relocation of EchoStar 1, at DISH's own risk, pending the grant of blanket earth station authority and the exchange of letters between the United States and Mexico for the re-licensing of the satellite under Mexican authority. In the event that such re-licensing fails to occur, DISH will request Commission authorization to move the satellite to another orbital location.

### III. USE OF C-BAND FREQUENCIES FOR TT&C

As the Commission is aware, the EchoStar 1 satellite is equipped with telemetry, tracking and command ("TT&C") beacons in the conventional C-band frequencies (specifically, 5926-5927 MHz and 6423-6424 MHz for command, and 4198.4-4198.6 and 4199.4-4199.6 MHz for telemetry and tracking). The Commission has already authorized the use of those frequencies to perform TT&C operations with EchoStar 1 at 148° W.L. on a non-protected, non-harmful interference basis. DISH requests authority for the use of the same frequencies with the same satellite at 77.15° W.L. on exactly the same basis.

Consistent with this precedent, DISH respectfully requests a waiver of Section 25.202(g) (in-band TT&C) to the extent necessary to permit such operations. Just as when the Commission authorized DISH to use these frequencies at 148° W.L., there is good cause for such a waiver. First, the continued use of these frequencies for the conduct of TT&C with the EchoStar 1

 $<sup>^{12}</sup>$  See EchoStar Satellite Corporation et al., 13 FCC Rcd 8595, at  $\P$  23 (Sat. & Radiocom. Div. 1998).

<sup>&</sup>lt;sup>13</sup> See WAIT Radio v. FCC, 418 F.2d 1153, 1157 (D.C. Cir. 1969), aff'd, 459 F.2d 1203 (D.C. Cir. 1972), cert. denied, 409 U.S. 1027 (1972).

satellite is essential, as the satellite is not equipped to receive commands or transmit telemetry and tracking information on any other frequencies. In addition, the continued use of these command frequencies on a non-protected, non-harmful interference basis will not increase the potential for interference with any lawful users of spectrum, as it will not conflict with the operations of any adjacent C-band satellite operators. The closest C-band satellite that will operate near the 77° W.L. orbital location when EchoStar 1 is transferred to that location is Brasilsat B3 operating at 75° W.L. <sup>14</sup> The closest C-band satellite to the west of 77° W.L. is Brasilsat B4 operating at 84° W.L. Thus, proposed operations of EchoStar 1's TT&C communications in two slivers of the conventional C-band will not cause any interference into the operations of either of these satellites.

To the extent necessary, DISH is also requesting from the Commission a limited waiver of the Trilateral Arrangement Regarding Use of the Geostationary Orbit reached by Canada, Mexico, and the United States as EchoStar 1 will be a Mexican-licensed satellite in the portion of the C-band arc reserved to the U.S. under that agreement. For the reasons set forth above, there is good cause for such a waiver. In addition, DISH notes that Mexico and Canada have both consented to EchoStar 1's limited use of the C-band when the satellite was operating at 119° W.L., in these countries' portion of the C-band arc.

<sup>&</sup>lt;sup>14</sup> While PanAmSat's Galaxy 4R satellite currently operates at 76.8° W.L., PanAmSat has recently submitted an application to deorbit the satellite in March 2009 and to transfer all C-band traffic to its Galaxy 2R satellite located at 93.10° W.L. *See* File No. SAT-STA-20090123-00008 (filed Jan. 23, 2009). As EchoStar 1 will not reach 77° W.L. until on or around May 22, 2009, its limited C-band operations will not interfere with Galaxy 4R.

<sup>&</sup>lt;sup>15</sup> See Public Notice, Trilateral Arrangement Regarding Use of the Geostationary Orbit Reached by Canada, Mexico, and the United States, *available at* http://www.fcc.gov/ib/sand/agree/files/satellite/trilat.pdf (rel. Sept. 2, 1988).

<sup>&</sup>lt;sup>16</sup> *Id*.

#### IV. WAIVER PURSUANT TO SECTION 304 OF THE ACT

In accordance with Section 304 of the Communications Act of 1934, as amended, 47 U.S.C. § 304, DISH hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise.

### V. CONCLUSION

For the foregoing reasons, DISH respectfully requests that the Commission grant the requested Special Temporary Authority for the relocation of EchoStar 1 to 77.15° W.L.

Respectfully submitted,

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